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ABSTRACT

This syllabus outlines a graduate-level introductory overview of the agencies, industries, and services whose primary concerns are the creation, processing, storage, distribution, and use of information; also considered are questions relating to technological impact, the role of the information professional, and cost-benefits. The course is divided into five parts: (1) general contexts, including preliminary definitions, prehistory, and historical convergences; (2) the information environment today, including technological antecedents, characteristics, and problems; (3) information needs, uses, and users; (4) the functions, processes, and products of formal information agencies and systems; and (5) critical problems dealing with economic considerations, legal constraints, professionalism, and estimating the future. A selected bibliography arranged by the syllabus topics is provided. (FM)

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Syllabus for IST 501

by

Robert S. Taylor

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INTRODUCTION

In the Catalog of the School of Information Studies at Syracuse University, the course IST 501 The Information Environment bears the following description: "Introductory survey of the agencies, industries, and services whose primary concerns are the creation, processing, storage, distribution, and use of information. Consideration of technological impact, role of the information professional, and cost-benefit questions." The course was formerly titled "Introduction to Librarianship." The title and description were changed to the present format in 1976.

The course, as presently constituted has been offered three times in the past two years (1976, 1977). Up to now the format has been one three-hour session once a week for fourteen weeks. Grading has been based on two to three brief papers; a diary of readings, notes, and analysis; and a term project. It has been assumed that the student will spend 12 to 15 hours per week on this course, including class time. As a 500-level course at Syracuse University, it is open to junior and senior undergraduates, as well as to graduates. About 10-15 percent of the enrollees have been undergraduates. It is, however, a beginning level graduate course and undergraduates are expected to meet those standards.

The format of the course, i.e. one three-hour session a week, has not been satisfactory for several reasons. The assumptions of the course, the lack of background in most students, and the need to transmit a large body of knowledge, only partially organized, makes a three-hour lecture-discussion neither comfortable for students and instructor nor appropriate to the subject matter. In the future

the course will be presented in 75-minute sessions twice a week, with a 45-minute lecture and a 30-minute discussion and review period. In addition, though it will retain the diary as an assignment, the grading will be based on short quizzes, and probably a final written examination. However, certain students, because of their background and knowledge, may be better served by writing a term report. Such cases may be negotiated with the instructor no later than the seventh week of the semester, and will eliminate the final examination for such students. Students will still be expected to put 12-15 hours per week in this course.

Though the present instructor has worked on and offered parts of this course during the past fifteen years at Lehigh University (Center for the Information Sciences), Hampshire College (Program on Language and Communication) and Syracuse University, this is the first time to his knowledge that such a course has been organized and offered as a whole in a professional information/library curriculum. For this reason, we feel it worth presenting as a syllabus, even though it is a slice at a particular point in time.

It is obviously a very large subject to cover, and it is "large" for several non-quantitative reasons. First of all, most students with standard liberal arts backgrounds seem to have missed two things in their education. They lack an appreciation for the impact of various technologies on society. Or, if they have thought of these technologies, they have done so only in negative and sterile fashion. Yet of all professions, the information profession (by whatever name) sits in the midst of technological change and, if it is to be a responsible profession and not merely Luddite, it will need to act as arbiter between humanism and technological change.

It is worth noting here that the library is the result of three of the most profound technological revolutions to affect the human race: the development of writing, the invention of the alphabet, and the invention of printing. We are now in the midst of a fourth revolution, perhaps as profound as that of the development of writing - called the "information revolution." In this context, most students lack any feel for the breadth and effect of technology on human history. Nor, unfortunately, are they prepared to participate in rational technological choice. Related and of more recent concern, e.g. the work of Harold Innis and others, is the effect of communication on history and culture, and the realization that, as Kenneth Boulding has pointed out, communication is the key to social phenomena of all kinds.

A second problem is one of approach and basic assumptions. No longer can "the library" be the starting point - the center of the universe, as in some Ptolemaic cosmology. The same can be said, by the way, of the computer and other communication artefacts. These devices are the physical result of the technology of our time. The book and the library were the products of earlier technologies. Because they - all of these devices - are physical devices - technological metaphors - they tend to freeze and to color the windows through which we view the world. We need to move away from this Ptolemaic world. We need now to accept and to build from a Copernican universe, with information at the center, the sun - and the library, the computer, and other such artefacts as planets. We must be concerned with processes, with the movement of messages. Not to do this will tend, over time, to relegate that portion of

the profession called "librarians" to a smaller and smaller corner of the information transfer processes of our society, embedded, as Pierce Butler once noted, in the "simplicity of their pragmatism." The library profession may not yet be ready for this inevitability. This attitude also has inhibitory effect on the acceptance and the design of such a course as this, for students too carry their biases into the classroom. A larger vision and a more relevant sense of structure and process are needed.

A third problem in dealing with a course of this nature is that we do not yet have accepted vocabularies to describe our phenomena.

> Rosalind: Answer me in one word
> Celia: You must borrow me
> Gargantua's Mouth
> first; t'is a word too great
> for any mouth of this age's
> size.
> - As You Like It

Nor do we have reasonable taxonomies with which to fruitfully structure the things we do know, or seem to know. For example, this course deals with the varying kinds of information needs, uses, and users in society. That is to say, there are a whole array of people with problems for which information in varying forms, shapes, and intents may be useful. And, on the other side, there is an array of information systems, services, and products - formal and informal - which carry possible solutions to problems. There are, however, no formal and acceptable ways of classifying

neither the needs and problems on one side nor the responses on the other. We simply are not there yet. But the only way to get "there" is to begin exploration, to begin naming places and locations on the map. This course is an early step in that direction.

The course is roughly divided into five parts. In the brief outline below, the numbers in parentheses indicate the approximate number of class periods (total 28) assigned to each topic. Roman numerals indicate the sections of the syllabus (I through VIII).

1. Contexts (4)
   - I. preliminary definitions
   - II. prehistory
   - III. historical convergences
2. Contexts: The Information Environment Today (3)
   - (IV in syllabus)
   - Technological antecedents
   - Characteristics
   - Problems
3. Information, Information Need and Use (8)
   - V. Contexts and Definitions
   - VI. Information Users and Uses
4. Information Systems, Services, and Products (6)
   - (VII in syllabus)
   - Functions
   - Processes
   - Information Industries and Agencies
5. Critical Problems (7)
   - (VIII in syllabus)

5. Critical Problems (continued)

Economic considerations

Legal constraints

Professionalism

Estimating the future

With this as background, there are three general objectives of the course.

- to provide students with a beginning structure by which they can see the setting of their professional activities.
- to develop an awareness of the varieties of information needs and uses in society, and concomitantly to make students more aware of their own information environment.
- to provide a knowledge of the structure, growth, and role of information systems, industries, and services in society.

More specifically, in fleshing out the bare bones of the syllabus and the logistics of the course itself, the following personal comments and explanations may be helpful.

1. The problem of <u>definition</u> is ever present, and especially defining "information" and its extensions: use, need, systems, profession, etc. Outside of some preliminary remarks in the first lecture, the task of defining is postponed to Part V - <u>Contexts and Definitions</u> - where meaning can be associated with problems and situations in which information is used. That is to say, we talk in terms of operational definitions, not absolutes.

2. Related to the process of defining "information" I believe it especially important to separate source-based from receiver-based definitions. This allows considerable more clarity in discussion. (see I A and V A)

3. Another dichotomy I have found useful is that between the information function (providing answers) and the informing function (providing context for solutions and decisions). See Part VII. It is worth noting that many people seem not to want answers, but rather context.

4. The diary generally has proven to be an excellent pedagogic device. It does however place a very heavy burden on the instructor if s/he really uses the diary as a form of dialogue with the student, i.e. making extensive marginal comment. In past syllabi, the diary and its purposes were described as follows.

> There are many papers, books, articles, and reports covering various aspects of the information environment. Some are downright poor, some have occasional insights, some are forms of special pleading, a few may even be worthwhile in toto. You should be aware of this range. Do not be afraid to state an opinion, but justify it.
>
> There are several purposes of the diary:
>
> - to list and analyze reading relevant to the course, assigned and especially non-assigned readings. By no means should diary be limited to assigned readings. The related and 'voluntary' readings will give the instructor a clue as to your breadth of coverage.
>
> - to develop for yourself an awareness of the breadth of information uses and activities in society and your role as an information professional.
>
> The diary entries should be dated. Entries should include some identification for recall and very brief summaries of the specific reading (or lecture or event or idea) with extensive personal comment and analysis by you.

Mere quantity of material read is not a sufficient indication of quality - though quantity is not unimportant. More critical are your insights and analyses - extracting material useful to you and to class dicussion, and developing your own frame of reference for seeing the information environment.

The diary should be typed if possible. If you write in longhand, please be sure it is legible. Leave plenty of space in margins for instructor's comment. You are expected to spend a minimum of 8 hours a week on the diary, 6 hours for reading, note taking, and analysis, and the remainder for editing and revising.

The diary will be marked on four criteria:

- extent and breadth of readings relevant to the course.
- ability to summarize briefly and clearly.
- analytic ability and originality of comment.
- illustration of ability to grow and to develop new insights.

5. There is no text for the course. There aren't any. In the past, two notebooks of papers were placed on reserve, plus a dozen or so books. This is not a satisfactory solution. Because of the heavy hand of the new copyright law, it is a problem that will plague institutions which attempt to design and experiment with new courses. This is especially true with a course such as this one, for it is not directed toward developing particular skills, but rather toward knowledge acquisition and attitude change. This requires lectures, extensive reading, discussion, and analysis. In the future, permission may be sought to reproduce critical papers, chapters, and reports so that each student may have copies.

6. As mentioned before, the course is large. It covers a great deal of ground for a number of non-quantitative reasons. Entirely beside possible skill courses (see especially Part VII A),

there are a number of courses embedded within the syllabus. There is a need, for example, for a good beginning course on information use (note two meanings of use in Part V B), and the possibility of several more as empirical evidence becomes more available. There is a need for several courses on the structure, the economics, and the legal contexts of the information industry, broadly conceived, including libraries. There is a need for one or several courses on the technologies of information transfer, including printing, the telephone, reprography, as well as the more obvious computer and telecommunication systems. These should be integrative and analytic courses, directed toward rational choice among competing devices to store and to move messages.

There is a need for a course on the history of communication as a social act; also a course on the history of the technologies of information transfer, not just as technologies, but as part of man's cultural surround. There is here also a necessity for sustained historical scholarship to follow the leads hinted at by Harold Innis, Edmund Carpenter, Father Walter Ong, Eric Havelock, and Elizabeth Eisenstein.

7. There are many things missing in this syllabus and some legitimate concerns treated skimpily. The important point, however, is that it is a beginning effort to think about the information environment as a cultural whole, as a process, and not as a set of insular activities, technologies, and people performing disparate things in isolation. This course is hopefully an early step in this process.

INTRODUCTION

8. The course, as presently conceived, is limited to the information environment in developed countries - the technologically advanced and especially the United States. I am not comfortable with this, because the real changes in communication and information transfer will occur in the developing countries during the next half-century, with profound and possibly traumatic impact on the human condition. That, however, is really the basis for another course. But there is a recognizable, and lamentable, lack of coverage in this course.

9. There is an obvious "tilt" to the syllabus - toward librarianship. The author is a librarian. The professional degree in the School of Information Studies is the Master of Library Science. Many professional students who choose this school have, at least partially, self-selected themselves as librarians, though the experience in the School may alter their direction and expand their options. In addition, and most certainly, the library (capital L) until three or four decades ago was indeed recognized and accepted - at least by the literate - as a major channel for the transmission of knowledge, information, and culture. That this is no longer the case is the story of this course.

- Robert S. Taylor
Syracuse University
January 1978

The Information Environment - Syllabus

I. Contexts

A. Levels of Definition: "Information"

1. The communication model

2. Mathematics of information (Shannon)

Theory of signal transmission

3. Source-based and receiver-based definitions

4. Problems in defining - Need for ambiguity

B. Information and Human Beings

Genetic code - "prewired"

Extragenetic Knowledge - the brain

Extrasomatic Knowledge - writing is prime example

II. Contexts: Prehistory

A. Preliterate societies

1. The oral tradition

Oral archives

Cultural memories

Transmission of culture in oral societies

2. Early stylistic codes, e.g. pottery motifs, a form of information message

Modern parallels

III. Context: Historical convergences

A. Writing, earliest ca. 3500 B.C.

Function of writing - basically ownership, business transactions, and administrative matters

Growth of trade and cities

Types of writing systems

III. (continued)

B. The Alphabet

Antecedents

"Invention" vs "Evolution"

Effects of alphabetization

standardization - the scripts

growth of scholarship

Literacy

C. Printing

Medieval antecedents - growth of industry (including pollution), science and technology, the universities

Convergences - Technological

papermaking

inks and varnishes

metallurgy of type metals

movable type casting

Convergences - Socio-economic

growth of business and trade

growth of literate urban middle class

growth of universities and medieval scriptoriums

rise of Humanism

Effects of printing

standardization - punctuation, spelling, formats, definitions

social and cultural

D. The Growth of Science, Technology, and Industry - Communication Processes

1. Relationship between science and technology

Changes in the concepts of technology and science

Growth of experimental science

III. (continued)

2. Communication developments

Postal and courier services

Scientific societies and the scientific paper

Invisible colleges of scientists

Newpaper and periodicals

Libraries

3. Industrial needs and information

Changes in the nature of industry

Goods "to" services

Public and private goods and services

E. Social and Economic Change

1. Public education

Assumptions and effects

Education as an industry

2. Growth of the library movement

The public library

American Library Association beginnings

Melvil Dewey and the technician

standardization

new bureaucracies

Carnegie

"Simplicity of their pragmatism" (Butler)

3. New professions and new interests

American Documentation Institute, now American Society for Information Science

Association for Computing Machinery

Communication and Journalism

4. The mass media - effect on traditional channels of information transfer

IV. Contexts: The Information Environment Today

A. Technological antecedents

1. Computers

Pascal/Leibniz

Jacquard loom

Babbage and his analytical machine

Hollerith and the punched card

Computers: early days (ENIAC, etc.); the stored program; first, second and third generations; time-sharing and on-lineness

2. Photography/Microforms

Daguerre

Dancer - microphotography (1839)

Dagron - first patent (1859)

Franco-Prussian War (1870)

American Documentation Institute (1937)

Expansion of microform use: libraries, archives, industry, catalogs

Current developments: Computer Output Microform (COM)

3. Telecommunications

Transportation and communication

Morse and the telegraph (1837)

Bell and the telephone (1876)

Radio

Television

"The medium is the message"

Marriage of computer and telecommunications

- "Compunications"

IV. (continued)

B. Characteristics of the New Information Environment (adapted from Mchale)

1. Exponential increase in the volume of information flow: mail; telephone messages; books and periodicals; patents; radio and television; computer storage; miniaturization.
2. Communication no longer constrained by time and space: effects of telephone, computer, radio and television; consequent decrease in "time cushion" between events and their consequences, between social changes and their impact; the "acceleration of history."
3. Breakdown in traditional systems for handling information: emergence of problems of information overload; "satisficing."
4. Change in the nature of resources: information (compared with energy and matter) is a non-depletive resource; all other resources dependent on information and knowledge for their utilization; information changes in the process of use, in ways we do not know yet.
5. Emergence of an information elite: growing gap between elite and information unsophisticated; potentially explosive problems.

C. Problems of the New Information Environment

1. Inability of human beings to adapt fast enough to new information structures, e.g. "future shock."
2. Need for better information filters: need to change from systems that supply information to systems that withhold information, without denying access when desired.

IV. C. (continued)

3. Need for institutional and bureaucratic information structures better adapted to change than those presently existing.

4. Need for sensitive information professionals at all levels who can bridge the gap between the elite and the unsophisticated.

V. Information, Information Needs and Use: Contexts and Definitions

Purpose here is not to derive - were it even possible - fixed and final definitions. Rather, concern is to develop operational definitions and contexts within which these concepts can be used in fruitful ways to organize and to discuss the data.

A. Information: there are two basic kinds of definitions of "information" - source-based and receiver-based.

1. Source-based

- information is a symbol or a set of symbols which has the potential for meaning (Faibisoff & Ely)
- knowledge of a particular event or situation (Webster, Third)

2. Receiver-based

- that which adds to or changes a person's representation of the world. (MacKay)
- data of value in decision-making (Yovits)
- basic test of information is its capacity to reduce uncertainty (Faibisoff & Ely)

3. Miscellaneous notes and comments

- Data are components of information, rarely information in themselves.(Glaser)
- Information is composed of data organized in some way, i.e. processed and structured. Only then can

V. A. 3. (continued)

an observer look at information and put a value on it which says that, in this form and at this time, "I understand and need it." (Glaser)

- Information is a national resource. Unlike other resources, it is heterogeneous and is not consumed in the process of use. Information is a prerequisite to the organization and allocation of all other resources. (Glaser)

- Information resources, unlike virtually any other resource, are not used up while being utilized. This changes the very meaning of the word "resource" and "use" because information resources do not follow the law of conservation of energy. (Lowi)

4. Types of information or knowledge (from Machlup, 21-22)

Practical knowledge

Intellectual knowledge

Ethical knowledge

Small talk or pastime knowledge

Spiritual knowledge

Unwanted knowledge

This is a useful kind of listing, but the categories form an a priori classification, source-based, and may or may not have much to do with information needs that people really have.

B. Information Use

There are two aspects or approaches to the concept of information use. They should be kept in mind when discussing "use."

- Use (I): how people make use of information systems and services, with all the compromises inherent in such utilization. This has to do with the interface between man and system, and with the means that users (note absence of non-users) employ in seeking, acquiring, and selecting information. User studies are usually referred to in this context, i.e. of

V. B. (continued)

actual (and measurable) demands that persons (called "users") place on formal information systems such as libraries.

- Use (II): how people use the information they receive, i.e. why people want and what people do with information consciously sought after. This is a much more complex concern. It has to do with (a) the total context of information surrounding a person; (b) the way a person views his or her problems; and (c) the conscious strategies, if any, a person employs in seeking, structuring, and using information. Dervin offers a useful kind of approach as a series of four states which a person perceives himself to be "in" when using information.
  - decision state: one in which a choice is to be made between or among alternatives.
  - problem state: one in which a person knows what she wants to do, but some obstacle or barrier stands in the way.
  - worry state: one in which a person lacks control or predictability.
  - comprehending state: one in which a person wants to understand something, comprehend something.

VI. Information Uses and Users

This topic provides an overview of the current state of knowledge about users: major studies, methodologies, variables, and conclusions, things we "know." It should be noted that the various classes of variables listed below can be used in most cases to describe both individuals and populations. The listings are not all inclusive, but rather examples.

VI. (continued)

A. Ways of Approaching the Study of Use/Need

1. how specific groups use agencies such as libraries.
2. how specific groups, e.g. chemists, use the literature of their discipline.
3. how people solve personal problems, and what formal and informal information channels they use in the process.
4. how special groupsor individuals interact with their total environment to obtain information.
5. what channels are preferred in what situations, and what effect do these channels have on information behavior.
6. how information messages move, e.g. movement of conference papers, transmission of rumor.
7. how messages move around organizations and what functions they serve.
8. we can study outstanding individuals - their diaries, notes, records, etc. - to see how information relates to their lives or to specific decisions.
9. we can study specific events to see how information moved and how it affected decisions in order to ascertain the role of information in various social processes.

B. Methodologies

There are a range of methods that have been and can be used in the empirical study of information needs and use. All have weaknesses. There is also a lack of good theory upon which to base such studies. Unfortunately many studies have not been well-planned, with results that, to be charitable, lack general

VI. B (continued)

validity. We are dealing with an extraordinarily complex activity, and studies in the field are based on some tenuous assumptions. However, with a certain amount of skepticism, we can begin to derive some useful insights into these processes, and some guidelines helpful in the design of operating systems and services.

Questionnaires

Interviews

Diaries

Case histories

Participant observation

Critical incident

Random alarm

Observation

Multiple operationalism

C. Demographic and Personal Variables

Age/sex

Education

Economic Status

Race/ethnicity

Motivation

Occupation

Level of information literacy

Level of media use

Degree of mobility

VI. (continued)

D. Kinds of Needs

Survival/crisis

Factual

Educational/comprehending

Problem-solving

Decision-making

Research/scholarship

Currency/informing

Leisure

etc.

E. Information Setting - Some Questions to be Considered

What are normal patterns of information generation/transfer/use in, for example, the classroom, laboratory, street, office, etc.?

What are normal patterns of information control and organization in formal and informal networks?

What are normal channels, in standard situations, of information transfer? alternate channels?

What are normal time factors in any particular environment, e.g. poison control center vis-a-vis an abstracting service?

What is the normal level of information activity, and what are its characteristics, in specific information contexts?

What possible barriers exist in accessing information in different environments?

VI. (continued)

F. Occupational/Social Groups

The list below obviously does not exhaust possible groups to be studied. Rather, the course studies a few groups and attempts to understand what we know about them and their information behavior.

Scientists

Technologists

Managers

Legislators

General Public

"Information Poor" (are there such?)

VII. Information Systems, Services, and Products

We include here the formal agencies and systems which have been consciously designed to produce, store, transmit, organize or retrieve information and to assist people who need information. These may range from such products as indexes, books, and periodicals to data base publishing and radio and television programs, from question-answering services to crisis hotlines, from libraries to social assistance and planning agencies.

There are two functions of systems, services, and products:

- an information function - traditional document-based services (e.g. libraries, retrieval services, dictionaries) are based generally on the assumption that information provides answers to specific questions. Their organization and services are structured toward this end.

VII. (continued)

- an informing function - an ongoing process by which people maintain an awareness of their environment. Most systems are not designed specifically for this purpose, except for the mass media, though many of the systems and services may be, and in fact are, used in an "informing" way.

A. Processes (with examples)

1. Creating and generating information

authors
letter writers
painters

research
scholarship

computer sensing
satellite weather photographing

2. Producing formal packages

publishers, including data base and reference book publishers

news and other programming on television and radio

film and video producers

consultants

3. Disseminating information

Law of Marketing: Make what people want to buy. But don't try to sell what you happen to make. (Dick Twedt in Harvard Bus. Rev., 75, p. 40, July/Aug.)

marketing

book industry: direct mail, jobbers, paperbacks, book stores, book clubs.

mass media directed toward specific audience (query: how much "informing" is done by a soap opera?)

VII. A. 3 (continued)

computer networks

education

4. Storing information

Medium: print and near print; microform; film; magnetic (digital, audio, video, other analog) laser memories

Formats: documents; maps; films; musical scores; computer can generate variety of formats and format variations, including dynamic formats and computer conferencing.

Agencies: archives; libraries and library-like agencies; computer utilities.

5. Organizing information

Intellectual or use-oriented structuring of information. This can include such things as the organization of engineering specifications in a single document, the organization of a reference handbook, the structure of files in a computer, as well as the organization of information packages (e.g. books) or their surrogates (e.g. cards) in libraries in order to provide intellectual access.

Basic considerations

Types of use anticipated (a frequently cited criterion, seldom used)

Formats

Level of information

Organizational schemes

Within a package, e.g. classification, index.

Physical objects, e.g. book classification

Surrogates, e.g. alphabetical

VII. A. (continued)

6. Retrieval of information

Information retrieval - a misnomer

Calvin Mooers; Robert Fairthorne

Fact retrieval

Reference retrieval

Document retrieval

Requirements

A data base

A communication system

A system of representation

Effectiveness measures

Recall and precision

Types of systems

Future developments

Augmentation and delegation of tasks to computer

Suggestive systems vs. Decisive systems

B. Information Industry and Agencies

1. Data Bases and Ancillary Services

Data base producers

- commercially available: bibliographic; financial; statistical (social, scientific, technical data)
- proprietary data bases

Data base wholesalers

Time sharing/communication services

Data base support services

- searching services
- document retrieval services

Data base hardware producers, e.g. specific terminal design

VII. B. (continued)

Software producers, information science only

Automated library systems

Library networks

2. Indexing and Abstracting Services

Index creators

Commercially available indexes and abstracts - effect of on-line systems on printed indexes

3. Records Management

Facilities management

4. Micropublishers

5. Packagers of Information and Its Byproducts

Newsletter and information services

Current awareness services

Selective Dissemination of Information (SDI)

Reference book publishers

6. Information on Demand Services

7. Information Evaluation

Clearinghouses

Information brokers

Report creators

8. Information analysts

Consulting firms in the information field

Research institutes, profit and non-profit

9. Facilitators for Information and Technology Transfer

10. Information support for Legislative Processes

VIII. Critical Problems

A. Economic considerations

1. Public/private goods and services

If there is - and will be - a mix of public and private information services and systems, what is or should be the approximate portion of each? what determines what should be public or private?

2. TANSTAAFL - who pays for information? who is to be served? by whom, with what and on what terms?

3. Cost/Benefit and Cost/Effectiveness - what is measurable in an information service? what are the objectives, for example, of a library against which measures can be made and evaluated? How small should a library be?

B. Legal constraints

1. Copyright - origin and rationale; contradictions in basic policy (U.S. Constitution, Article I, #8); copyright law and revision of 1976; potential effects on information transfer; fair use.

2. Author compensation for library circulation - Scandanavian experience.

3. Privacy - legal recognition; "privilege" vs. "right"; legal effect of "right to privacy"; effect of technology; "sunshine laws"; social data collection.

C. The Information Professions and Professional Education

Professions are conspiracies against the laity...
- George Bernard Shaw

1. What is a profession? Is librarianship a profession?

VIII. C. 1. (continued)

Is there a broader profession? If so, what does it look like? What are its special skills and knowledge?

2. Defining a profession (from Schein)

- full-time occupation
- strong motivation or calling
- specialized base of knowledge and skills acquired during prolonged period of education and training
- based on general principles, theories, or propositions
- a service orientation
- service to a client based on the objective needs of the client
- professional knows better what is good for the client than the client himself, i.e. autonomy of judgment of own performance
- a professional association which define criteria of admission, educational standards, licensing or other formal entry examination, career lines within the profession and areas of jurisdiction
- high expertise, but professional knowledge assumed to be specific
- ordinarily not allowed to advertise or to seek out clients

3. What is the content of education for the information professions? Need to distinguish among

Information science

Information technology

Information service

D. <u>Information Transfer, Libraries, and the Future. (A Summary)</u>

1. Estimating the future: hazards, methods.
2. Changes in traditional institutions.
3. The rise of new information agencies.
4. What to do while waiting for tomorrow.

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The bibliography is arranged by the topics in the Syllabus, and within those topics in approximately the order of subjects as they are considered in the course. There are several items listed under "General" at the beginning. They will be referred to several times throughout the bibliography.

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